NETWORK ADMINISTRATOR MANUAL

Configuring an Evolis printer via Wi-Fi or Ethernet

Evolis Card Printer © 2012. All rights reserved.
September 2012.
Ref. KU-034-ENG Rev A0

Document History

Initialization

Written by:	LCSI
Approved by:	A. PUEL
Date:	

Update chart

Version	Description	Date
A0	Creation	2012-10-23

Table of contents

1 - Introduction 5
1.1 Introduction 5
1.2 List of icons 5

2 - General remarks 6
2.1 Interface characteristics 6
2.2 TCP/IP Protocol 6
2.3 Wi-Fi 6
2.4 MAC address 7
2.5 Hostname 7
2.6 IGMP 7

3 - Network configuration 8
3.1 Network installation wizard 8

4 - Printer configuration using escape commands 10
4.1 Access to the printer dialogue menu 10
4.2 List of Escape commands 11
4.2.1 General settings 11
4.2.2 Wi-Fi: General settings 13
4.2.3 Wi-Fi: Rwifi and Pwifi Keywords list 15

5 - Evolis printer configuration settings 17
5.1 Access to the administration web page 17
5.2 Viewing the settings 17
5.2.1 Network 17
5.2.2 Wireless 18

6 - Examples of printer configuration 19
6.1 Configuring a printer in DHCP mode, located on a sub-network 19
6.1.1 With the embedded web server 19
6.1.2 With escape commands 20
6.2 Configuring a printer with a static IP address, on a subnet with WINS resolution 21
6.2.1 With the embedded web server 21
6.2.2 With escape commands 21
6.3 Configuring a printer with a static IP address, on a subnet without WINS resolution 23
6.3.1 With the embedded web server 23
6.3.2 With escape commands 23
6.4 Configuring a printer in Wi-Fi mode - Ad hoc with no security 25

6.4.1 With the embedded web server 25
6.4.2 With escape commands 25
6.5 Configuring a printer in Wi-Fi mode - Access point with Wep 128 bits security and static IP adress 26
6.5.1 With the embedded web server 26
6.5.2 With escape commands 26
6.6 Configuring a printer in Wi-Fi mode - Access point with WPA-AES security and IP adress in DHCP mode 27
6.6.1 With the embedded web server 27
6.6.2 With escape commands 27

Table of figures

Figure 1: Network installation wizard 8
Figure 2: Welcome screen 9
Figure 3: Access to the printer dialogue menu 10
Figure 4: Printer's properties window 10
Figure 5: Printer's properties window 11
Figure 6: Web interface - Network 17
Figure 7: Web interface - Wireless 18
Figure 8: DHCP mode configuration 19
Figure 9: Web server (DHCP mode) 19
Figure 10: Static IP configuration with WINS resolution 21
Figure 11: Web server (Static IP) 21
Figure 12: Static IP configuration without WINS resolution 23
Figure 13: Web server (Without WINS resolution) 23
Figure 14: Web server (Wi-Fi - Ad hoc) 25
Figure 15: Web server (Wi-Fi - Access point - Wep 128) 26
Figure 16: Web server (Wi-Fi - Access point - WPA-AES) 27

1 - Introduction

1.1 Introduction

This manual describes how to configure a Primacy or a Zenius printer connected to Wi-Fi or to a TCP/IP network, also known as an Ethernet network.

The two printers are similar, for this reason, the network administrator manual is the same for both printers.

This information is intended for well-informed readers who are specialistes in computer networking.

The examples given are based on Windows 7.

Changing the printer's basic settings, without prior knowledge of the layout of the LAN in question or without genuine technical knowledge may result in a malfunction of the printer, and may even extend to a more widespread failure of all part of the LAN.

Contact your System and Network Administrator before connecting to or changing the settings for your local area network.

1.2 List of icons

Warning Sign:
Indicates an operation which require special attention.

Note:
Indicates general remarks.

No entry sign:
Identifies steps or actions strictly prohibited.

Eye:
Inspect, Check.

2 - General remarks

All Evolis printers have the benefit of a TCP/IP network connection mechanism.

This feature is available as standard or as an option, depending on the model in the range.

By default, the printer comes configured in DHCP mode (Dynamic Host Configuration Protocol), which means that its IP address is supplied by the network. Besides, by default, Wi-Fi is disabled.

In addition to these basic settings, the network administrator has the option of configuring the printer differently in order to comply with the constraints imposed by the corporate LAN:
- Printer connected in a subnet, in DHCP.
- Printer connected within a subnet with fixed IP address, with WINS resolution.
- Printer connected within a subnet with fixed IP address, without WINS resolution.
- Printer connected in Wi-Fi.

The printer may be identified on the network according to:
- Its hostname (NETBIOS),
- Its IP address,
- Its serial number.

The user-definable settings are:
- The printer's IP address,
- Subnet mask,
- Gateway,
- WINS server,
- Wireless connection settings

The following sections describe the procedures to be followed in order to configure the printer taking the specific features of the LAN / Wi-Fi into account.

The examples and screen images are from a Microsoft Windows environment, on the basis of which your System and Network Administrator will have full scope to configure the printer in other environments such as Mac OS X or Linux.

2.1 Interface characteristics

Protocol:	10Base-T / 100Base-T
Speed:	10Mbit/sec and 100Mbit/sec, automatic detection
Connection:	Auto-MDX
Link:	Half / Full duplex
LED:	Green LED On = 10Mbit/s Off = 100Mbit/s Orange LED On = Printer connected to network Flashing = Printer connected and network traffic

2.2 TCP/IP Protocol

- IPv4 compatible
- IP address configured under DHCP (factory setting) or manually
- Raw mode printing uses the TCP/9100 port
- Name authentication is based on NBNS (NetBios Name Server)
- NBNS service via TCP for WINS resolution when the WINS server is configured.

When the IP address is static, the configuration relating to the gateway, subnet masks and WINS resolution is set manually.

When the printer is configured in DHCP mode, this data is supplied by the DHCP server.

2.3 Wi-Fi

Your printer may have an optional Wi-Fi interface. Out of factory, the wired interface is enabled and the Wi-Fi interface is disabled. See how to configure the printer on a Wi-Fi network on paragraph 5.2.2 Wireless, page 18.

2.4 MAC address

- Generated from the printer's serial number with the Evolis 00-1A-FD header (Evolis OUI - Organisationally Unique Identifier).
- For example, for the serial number P07100001234, the MAC address is 00-01-FD-00-04-D2.
- 00-04-D2 is the hexadecimal transcription of the decimal value 001234.

MAC address is visible beneath the printer

2.5 Hostname

The printer name (hostname) is automatically set as EVO_NNN_XXXXXXX, where:

- **EVO** is the root for Evolis products
- NNN varies with the printer model:
  - **PR1** for Primacy
  - **ZE1** for Zenius
- XXXXXXX is obtained from the printer's serial number, e.g. EVO_PR1_0001234 for serial number Z71**0001234**

Hostnames are used by various naming systems. Evolis limits the hostname to 15 characters according to the Windows Netbios limitations: http://support.microsoft.com/kb/909264/en-us

2.6 IGMP

Evolis uses IGMP frame to send query to all printers connected to the network. To use the discovery services offered by the Evolis Premium Suite, it is important that the network gateways support IGMP frames. To route Multicast traffic between two LANs, the gateway requires PIM Dense or PIM Sparse mode.

Example for Windows Server 2003: http://www.labo-microsoft.org/articles/win/rad2003/7

The default Evolis Multicast address is 224.69.86.79.

3 - Network configuration

The installation of USB driver is not described in this manual. Once the Evolis Print Center is installed, follow the following instructions.

3.1 Network installation wizard

1. Launch the Evolis Print Center and click on ***Tools***, then on ***Network printer installation wizard (DHCP)*** for an installation in DHCP mode or on ***Advanced network printer installation wizard (static IP)*** for a ptinter installation with static IP.

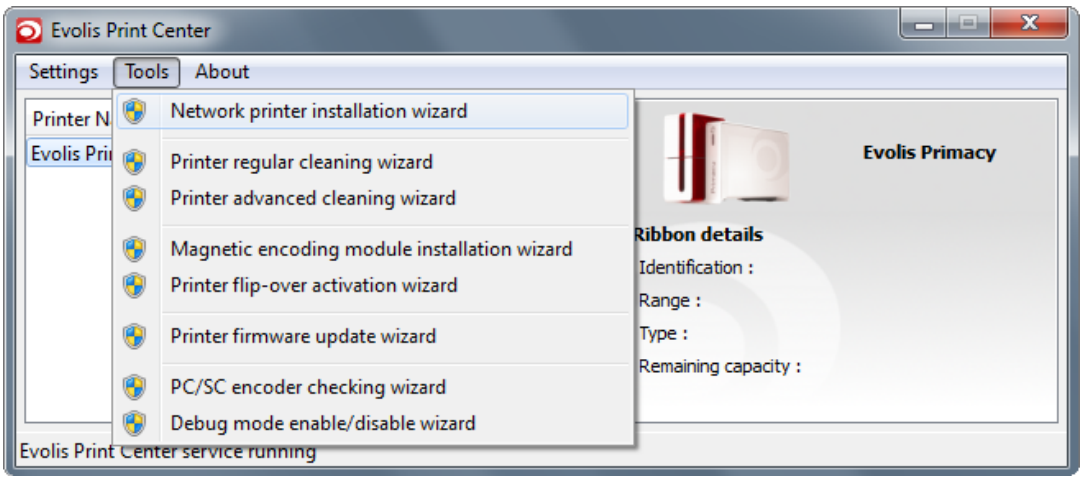

Figure 1: Network installation wizard

2. The following windows opens:

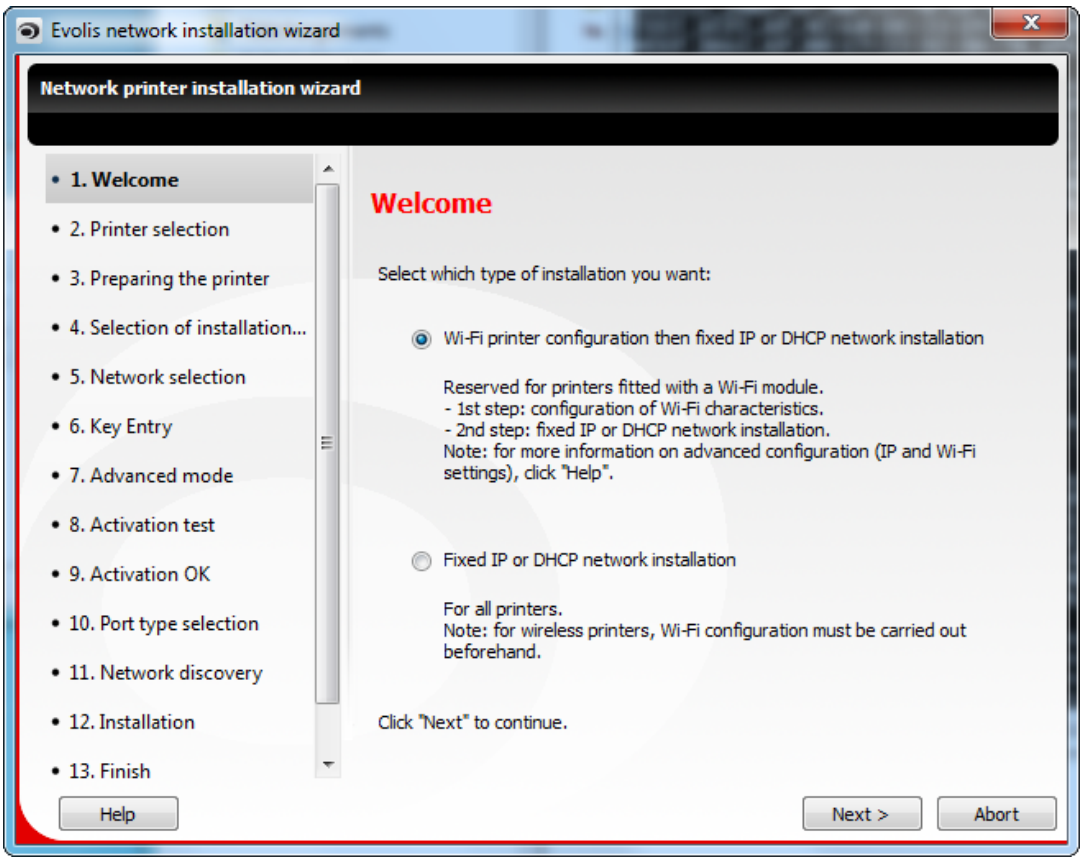
Evolis network installation wizard
Network printer installation wizard
1. Welcome
2. Printer selection
3. Preparing the printer
4. Selection of installation...
5. Network selection
6. Key Entry
7. Advanced mode
8. Activation test
9. Activation OK
10. Port type selection
11. Network discovery
12. Installation
13. Finish
Welcome
Select which type of installation you want:
Wi-Fi printer configuration then fixed IP or DHCP network installation
Reserved for printers fitted with a Wi-Fi module.
- 1st step: configuration of Wi-Fi characteristics.
- 2nd step: fixed IP or DHCP network installation.
Note: for more information on advanced configuration (IP and Wi-Fi settings), click "Help".
Fixed IP or DHCP network installation
For all printers.
Note: for wireless printers, Wi-Fi configuration must be carried out beforehand.
Click "Next" to continue.
Help
Next >
Abort

Figure 2: Welcome screen

3. Follow the instructions of the wizard in order to install your printer.

4 - Printer configuration using escape commands

Administrators can also configure printers by means of ESCape commands.

To do so, it is essential to install the printer and its USB driver beforehand, in order to have a direct connection available for dialogue.

4.1 Access to the printer dialogue menu

1. Open the ***Evolis Print Center.***
2. Double click on the printer you want to dialog with.

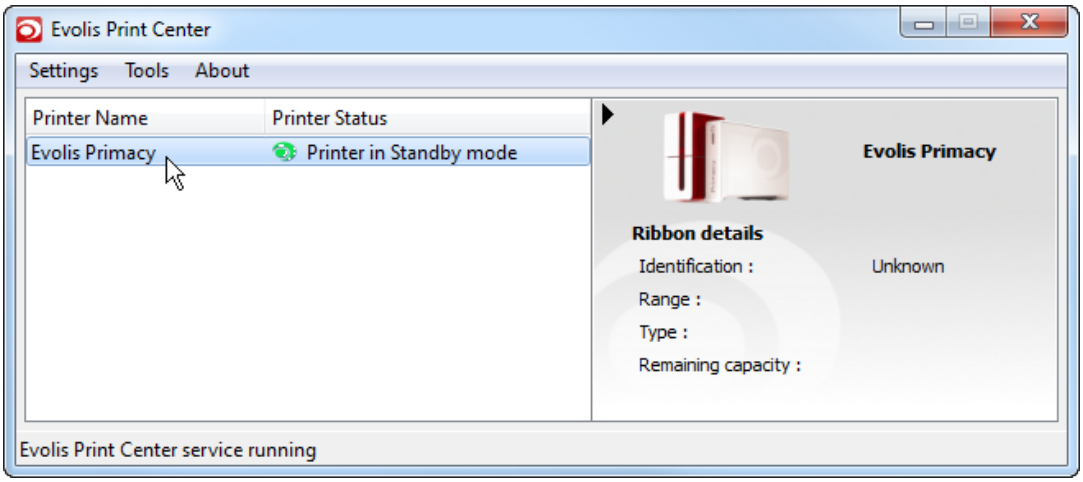

Figure 3: Access to the printer dialogue menu

3. A properties window opens. Click on ***Maintenance***.

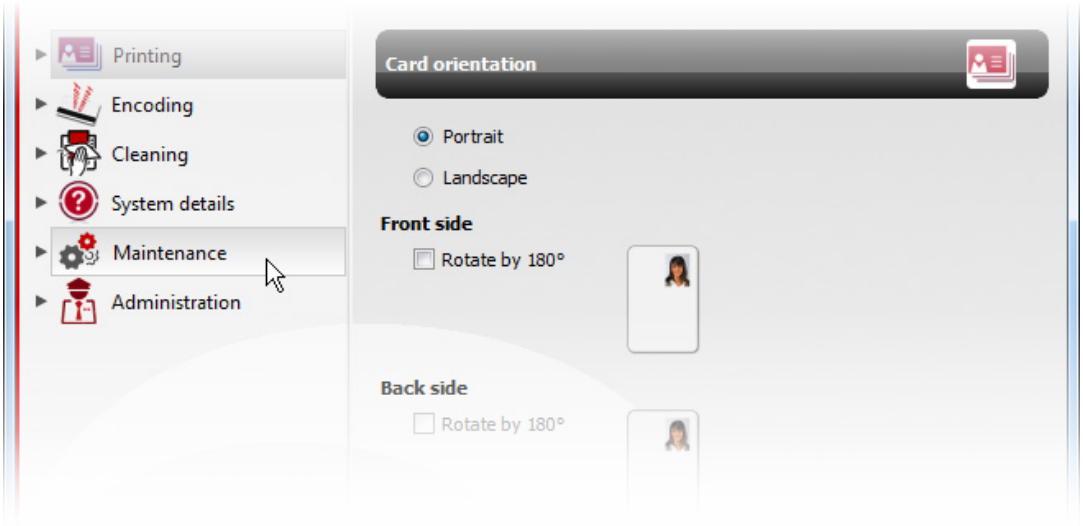

Figure 4: Printer's properties window

4. In ***Printer commands prompting*** sub-menu, you can enter ESC commands in ***Command*** field.

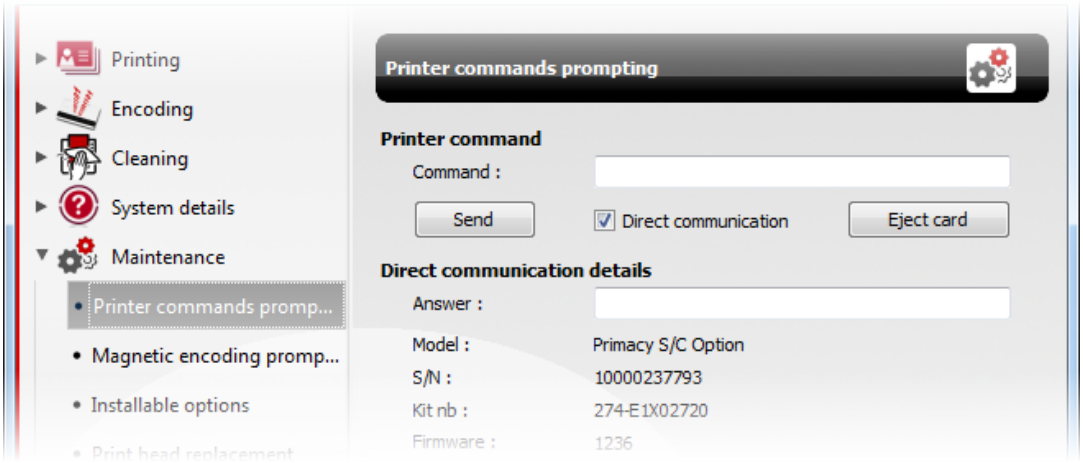

Figure 5: Printer's properties window

4.2 List of Escape commands

It is recommended to always read the contents or status of the printer before making any changes. Similarly, after any modification, check that new data is handled properly by reading it.

To enter an escape sequence, fill the ***Command*** field with instructions described hereafter.

It is recommended to enter Escape commands via USB connection in order to avoid losing the connection.

4.2.1 General settings

Escape sequence:	Read the printer's IP address
Command:	**Rip;opt1**
Parameters:	value **1** is optional, if set, it returns the dhcp status: "Manual" if the IP has been set manually or "Auto" if dhcp is activated.
Example:	**Rip;1**
Return:	IP adress (i.e. 192.168.1.10 Auto)
Note:	-

Escape sequence:	Set the printer's IP address
Command:	**Pip;par1**
Parameters:	**par1** is the IP address to be set, must be 4 digit separated by dot character '.' or it can be the string "dhcp" to enable DHCP service.
Example:	**Pip;192.168.0.1** or **Pip;dhcp**
Return:	**OK** or **ERROR CDE**
Note:	When the IP address entered is set to 0.0.0.0 it disables the interface.

Escape sequence:	Read Mask address
Command:	**Renm**
Parameters:	-
Example:	-
Return:	Ethernet subnet mask (i.e. 255.255.255.0)
Note:	-

Escape sequence:	Read Hostname
Command:	**Rehn**
Parameters:	-
Example:	-
Return:	Hostname (i.e. EVO_PR180023456)
Note:	-

Escape sequence:	Set Mask Address
Command:	**Penm;par1**
Parameters:	**par1** is ethernet subnet mask to be set, 4 numbers separated by dot character '.'.
Example:	**Penm;255.255.255.0**
Return:	**OK** or **ERROR PARAMETERS**
Note:	When using DHCP, this subnet mask is given by DHCP server. This is useful only when IP address is set manually

Escape sequence:	Read Gateway address
Command:	**Regw**
Parameters:	-
Example:	-
Return:	Ethernet gateway IP address (i.e. 192.168.0.1)
Note:	-

Escape sequence:	Set Gateway address
Command:	**Pegw;par1**
Parameters:	**par1** is Gateway IP address to be set, 4 numbers separated by dot character '.'.
Example:	**Pegw;192.168.0.1**
Return:	**OK** or **ERROR PARAMETERS**
Note:	When using DHCP, the gateway is given by DHCP server. This is useful only when IP address is set manually.

Escape sequence:	Read Win Server address
Command:	**Rews**
Parameters:	-
Example:	-
Return:	WINS server IP address (i.e. 192.168.0.2)
Note:	-

Escape sequence:	Set Win Server address
Command:	**Pews;par1**
Parameters:	**par1** is WINS server IP address to be set, 4 numbers separated by dot character '.'.
Example:	**Pews;192.168.0.2**
Return:	**OK** or **ERROR PARAMETERS**
Note:	When using DHCP, the WINS server is given by DHCP server. This is useful only when IP address is set manually. This is used to register the printer hostname, so in case of sub-network the printer is found faster.

Escape sequence:	Read Multicast address
Command:	**Rmip**
Parameters:	-
Example:	-
Return:	224.69.86.79
Note:	The multicast IP address (by default: 224.69.86.79) is used to discovery Evolis printers present on the network.

Escape sequence:	Set Multicast address
Command:	**Pmip;par1**
Parameters:	**par1** is Multicast IP address to be set, 4 numbers separated by dot character '.'.
Example:	**Pmip;224.69.86.79**
Return:	**OK** or **ERROR PARAMETERS**
Note:	Evolis recommends to not modify this parameter.

Escape sequence:	Restart network
Command:	**Snetw**
Parameters:	-
Example:	-
Return:	-
Note:	Restart network with saved configuration. This command as the same effect as clicking on button "Restart Network" on printer web page.

4.2.2 Wi-Fi: General settings

Escape sequence:	Presence of Wi-Fi module
Command:	**Rtp;w**
Parameters:	-
Example:	-
Return:	**0 / 1**
Note:	This command return **1** if the Wi-Fi module is present in your printer or **0** if it is not.

Escape sequence:	Read Wifi parameters
Command:	**Rwifi;keyw**
Parameters:	**keyw** is the parameter to be read.
Example:	**-**
Return:	The value of selected parameter or **ERROR PARAMETERS**
Note:	See paragraph 4.2.3, page 15 for a list of keywords.

Escape sequence:	Set Wifi parameters
Command:	**Pwifi;keyw;value**
Parameters:	**keyw** is the parameter to be modify. **value** is the new value of selected parameter.
Example:	**-**
Return:	**OK** or **ERROR PARAMETERS**
Note:	See paragraph 4.2.3, page 15 for a list of keywords.

Escape sequence:	Send ATi command
Command:	**Cwifi;cmd**
Parameters:	**cmd** is the command to be send to the WiFi module.
Example:	-
Note:	see ATi_Programmers_Manual_8_40.pdf

Escape sequence:	Wi-Fi module status
Command:	**Cwifi;RP2**
Parameters:	-
Example:	-
Return:	LAN-to-WiFi Bridge Mode when BRM>0: "LAN/WIFI Bridge Mode,<LAN Status>,<WIFI status>" Where, <LAN Status> 0 – No Link 1 – Link OK <WiFi Status> 1 – Not Connected 2 – Connecting 4 – Connected
Note:	-

Escape sequence:	List of all Wi-Fi networks available
Command:	**Cwifi;RP20**
Parameters:	-
Example:	Jetta,AP,06:14:6C:69:4A:7C,WPA,1,25 RTL8186-default,AP,00:E0:4C:81:86:86,NONE,1,77 dlink_test,AP,00:1C:F0:9A:63:7A,NONE,1,68
Return:	List of up to 16 APs and Ad-Hoc networks available in the surrounding area. Each line contains the following comma-separated fields: <SSID>,ADHOC|AP,<BSSID>,<security type>,<channel>,<RSSI> • <security type>=NONE or WEP64 or WEP128 or WPA or WPA2 • <RSSI>= Value between 0-255 which represents SNR+NoiseFloor. Higher SSI values indicate weaker signal strength.
Note:	-

4.2.3 Wi-Fi: Rwifi and Pwifi Keywords list

The following keywords are to be entered in the command field instead of ***keyw*** and ***value*** parameters of Rwifi and Pwifi settings.

These keywords are case sensitive.

Escape sequence:	Read all Wifi parameters
Keyword:	**all**
Parameters:	**keyw** is the parameter to be modify. **value** is the new value of selected parameter.
Example:	**Rwifi;all**
Return:	All Wifi parameters. Example: • RP0;CO2128- D • RP1;ID807p03 30.6.2 • RP5;14061A98 • MACA;001AFD00146A • MDE;2 • WLCH;11 • WSI0;NETGEAR_BE • WST0;4 • WKY0; • WPP0;********** • EUSN; • EPSW;

Escape sequence:	Read all Wifi parameters
Keyword:	**MDE**
Value:	**0**: Disable **1**: Connection in AdHoc mode, The printer creates a WiFi network with SSID configured in WSI0 (non secured or WEP available). Then set static IP. **2**: The printer connects to a WiFi network with SSID configured in WSI0.
Example:	**Rwifi;MDE** or **Pwifi;MDE;2**

Escape sequence:	Wireless LAN Communication Channel
Keyword:	**WLCH**
Value:	**1 to 13**: When the wireless interface is configured to operate in Ad-Hoc mode, this parameter must be given a value between 1 and 13 that defines the channel to be used for beacon transmission. When the wireless interface joins an already existing Ad-Hoc network, it adopts that network‘s channel.
Example:	**Rwifi;WLCH** or **Pwifi;WLCH;11**

Escape sequence:	Wireless LAN Service Set Identifier
Keyword:	**WSI0**
Value:	The destination Wireless LAN Service Set Identifier (SSID) string. SSID required for communications with a specific WLAN Access Point (AP) or Ad-Hoc. The access point must be configured with the same SSID.
Example:	**Rwifi;WSI0** or **Pwifi;WSI0;Name_Of_SSID**

Escape sequence:	Wireless LAN Security Type Array
Keyword:	**WST0**
Value:	The Wireless LAN security type for each individual SSID in the array. **0:** No security **1:** WEP 64 **2:** WEP 128 **3:** WPA-PSK with TKIP encryption **4:** WPA2-PSK with TKIP or AES encryption **105:** WPA-TKIP Enterprise with EAP-TLS or PEAPMSCHAPv2. RADIUS Certification Verification will be skipped **106:** WPA2-AES Enterprise with EAP-TLS or PEAPMSCHAPv2. RADIUS Certification Verification will be skipped
Example:	**Rwifi;WST0** or **Pwifi;WST0;4**

Escape sequence:	Wireless LAN WEP Key Array
Keyword:	**WKY0**
Value:	The Wireless LAN WEP keys in the 4-slot WEP key array. Value must be a Hexadecimal representation string, where each byte is described by 2 ASCII characters in the range [0'..'9'], [A'..'F'] or [a'..'f']. When using 64-bit WEP (**WST0=1**), key may contain 10 characters (defining 5 bytes). When using 128-bit WEP (**WST0=2**), key may contain 26 characters (defining 13 bytes).
Example:	**Rwifi;WKY0** or **Pwifi;WKY0;WepKey**

Escape sequence:	Wireless Personal Shared Key Pass-Phrase
Keyword:	**WPP0**
Value:	The wireless LAN WPA-PSK pass-phrase. For WPA2, the WSEC parameter must be set as well. If WSI0 (SSID) is not empty, WPA-PSK security is enabled for WiFi connections and pass is used in generating the WPA-PSK encryption key. The allowed value for pass is an ASCII string containing 8-63 characters.
Example:	**Rwifi;WPP0** or **Pwifi;WPP0;WpaPassphrase**

Escape sequence:	Domain and User name for WPA/WPA2 Enterprise mode
Keyword:	**EUSN**
Value:	Sets the login user name to be used for WPA/WPA2 Enterprise. This parameter takes effect following either a hardware or software reset only. A change to this parameter during the wireless interface operation does not affect the current connection.
Example:	**Rwifi;EUSN** or **Pwifi;EUSN;Login_of_user**

Escape sequence:	Password for WPA/WPA2 Enterprise mode
Keyword:	**EPSW**
Value:	Sets the password to be used for WPA/WPA2 Enterprise. This parameter takes effect following either a hardware or software reset only. A change to this parameter during the wireless interface operation does not affect the current connection.
Example:	**Rwifi;EPSW** or **Pwifi;EPSW;Password_of_user**

5 - Evolis printer configuration settings

5.1 Access to the administration web page

Each printer has an embedded web server which can be used to display configuration data.

The administration page is reached by entering the IP address into your web browser. The address of the printer's integrated web server is determined as follows:

- The printer's hostname must be entered in lower case.
  - For example, for a printer having hostname «EVO_PR1_0023456», enter **http://evo_pr1_0023456**.
  - The IP address may be entered if you don't know the printer's hostname, enter **http://xxx.yyy.zzz.ttt** (i.e. 192.168.2.13).

If you don't know the hostname or the IP address, please refer to the TCP/IP Protocol subsection of this section for further details on how the hostname is structured.

5.2 Viewing the settings

Some of this data can also be changed using this same interface.

Two web pages display all the network settings. The tab "Network" to configure the TCP/IP parameters and the tab "Wireless" to configure the Wi-Fi parameters.

5.2.1 Network

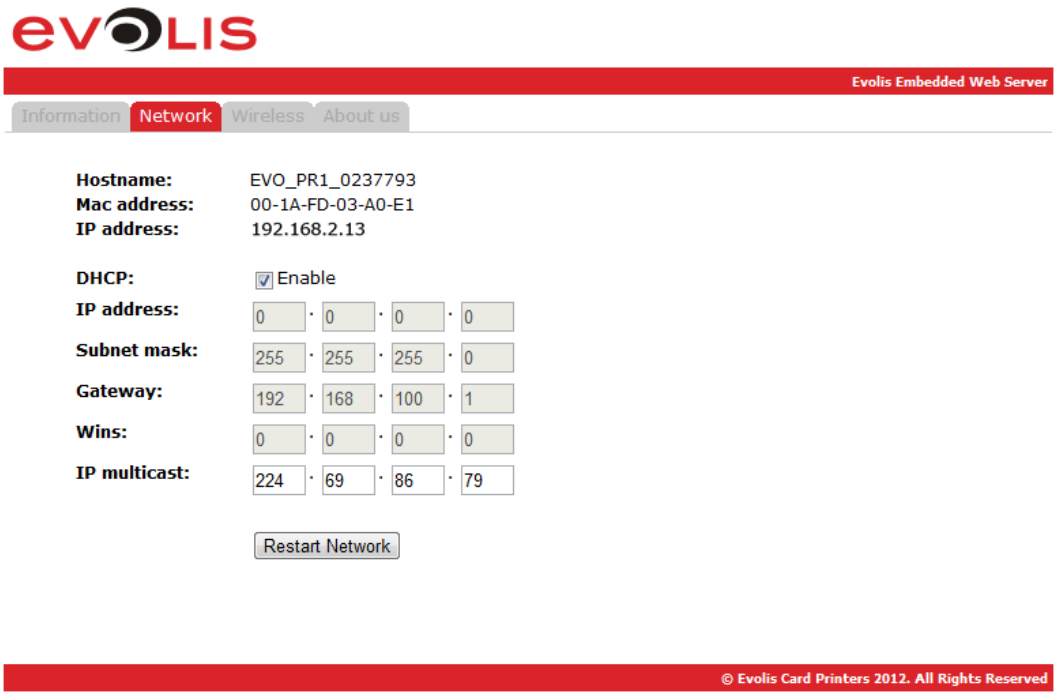

Figure 6: Web interface - Network

On the Network web interface, you can enable or disable the DHCP mode. When the DHCP mode is enabled, only ***IP Multicast*** field can be filled.

Other fields can be filled only if DHCP mode is disabled.

5.2.2 Wireless

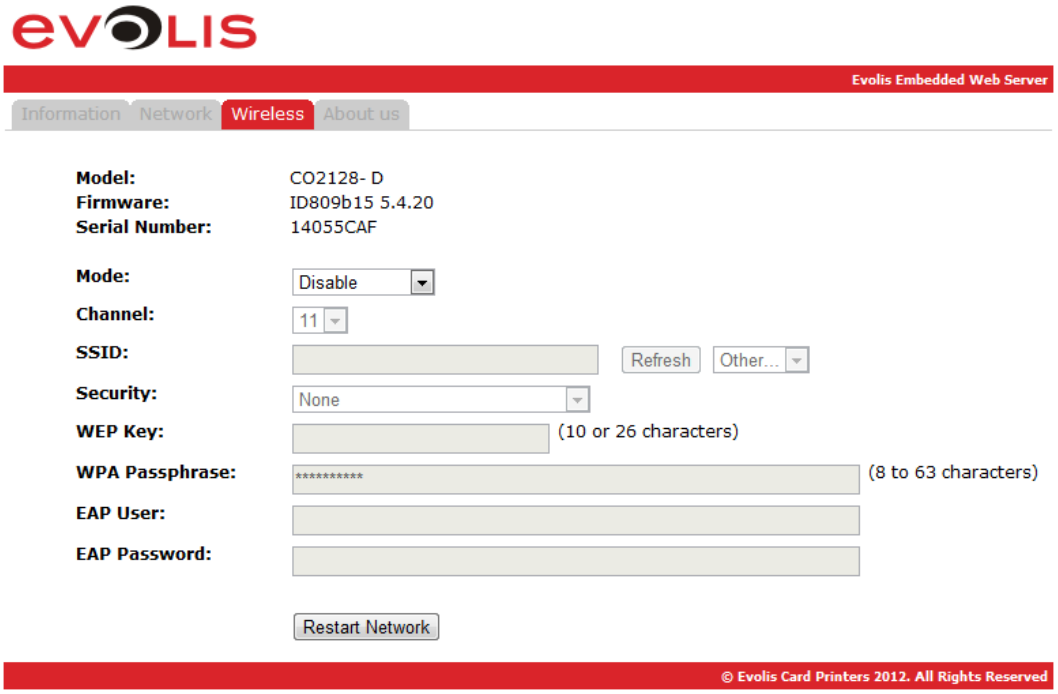

Figure 7: Web interface - Wireless

On the Wireless web interface, you can enable or disable the Wi-Fi. When the Wi-Fi is disabled, no field can be filled.

If the Wireless mode is enabled, usual wireless settings can be configured.

When setting mode other than ***Disable***, the wired connection becomes disable.

6 - Examples of printer configuration

In this section, you will find six configuration examples illustrating the settings to be configured, along with the search method and selection of the printer on the network.

This list is not exhaustive, and your network administrator is free to contact your Evolis reseller for further information.

6.1 Configuring a printer in DHCP mode, located on a sub-network

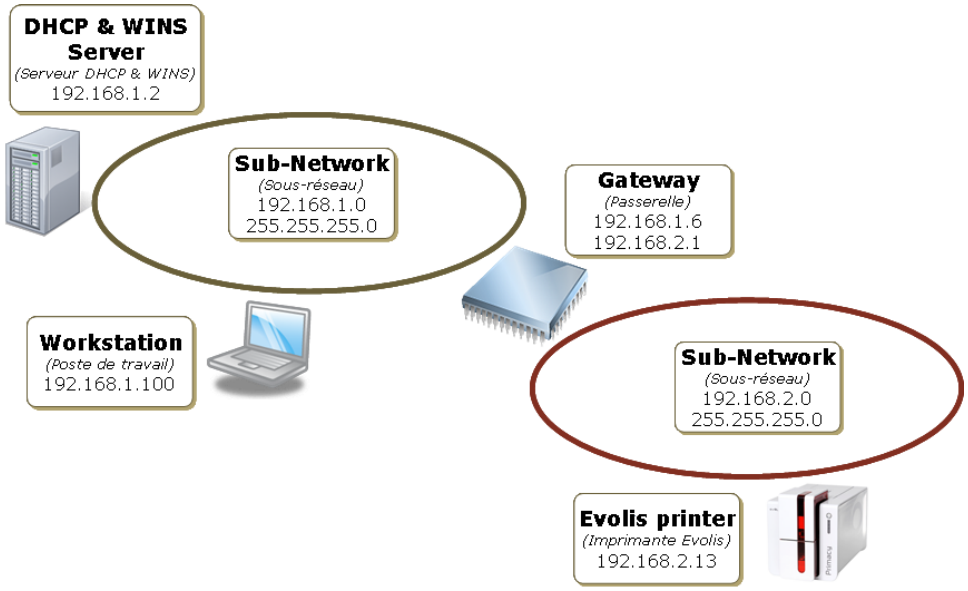

Figure 8: DHCP mode configuration

6.1.1 With the embedded web server

1. Open the web server page.
2. Click on Network tab.
3. Check the DHCP checkbox to enable the DHCP mode.
4. Click on **Restart Network** button.

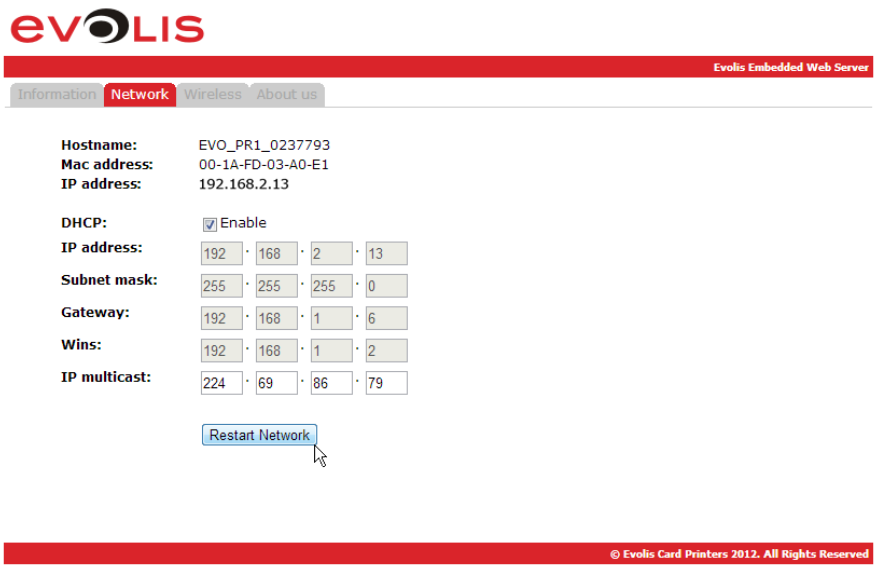
Evolis Embedded Web Server
Information
Network
Wireless
About us
Hostname: EVO_PR1_0237793
Mac address: 00-1A-FD-03-A0-E1
IP address: 192.168.2.13
DHCP: Enable
IP address: 192 . 168 . 2 . 13
Subnet mask: 255 . 255 . 255 . 0
Gateway: 192 . 168 . 1 . 6
Wins: 192 . 168 . 1 . 2
IP multicast: 224 . 69 . 86 . 79
Restart Network
© Evolis Card Printers 2012. All Rights Reserved

Figure 9: Web server (DHCP mode)

6.1.2 With escape commands

1. Open the Evolis Print Center and right-click on the printer you want to configure, then on properties.
2. In the printer properties window, click on **Maintenance**.
3. In Command field, type sequentially:
   - **Pip;dhcp**
   - **Snetw**.
   - Check your configuration by typing **Rip;1**. The result should be: **192.168.2.13 Auto**

6.2 Configuring a printer with a static IP address, on a subnet with WINS resolution

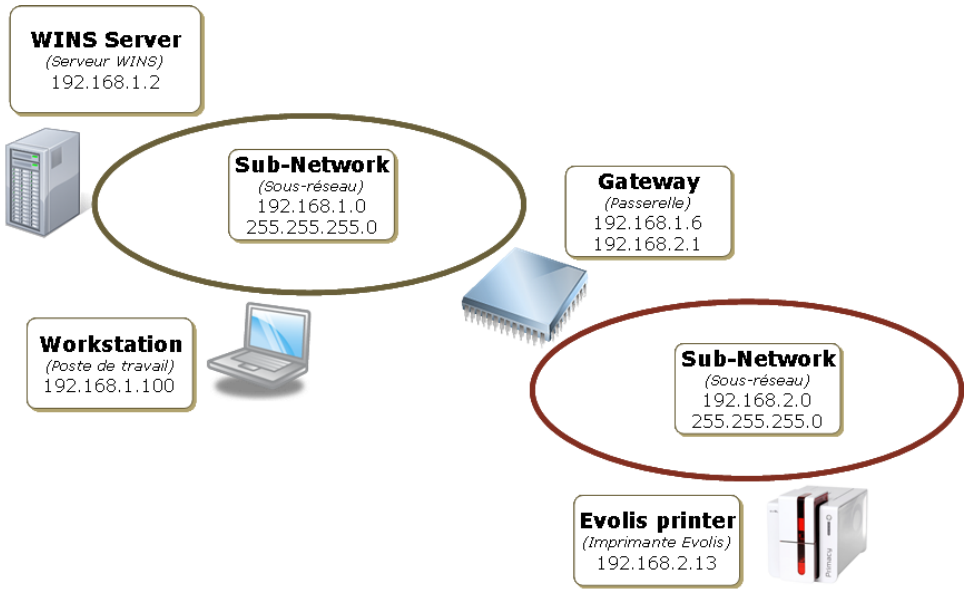

Figure 10: Static IP configuration with WINS resolution

6.2.1 With the embedded web server

1. Open the web server page.
2. Click on Network tab.
3. Uncheck the DHCP checkbox to disable the DHCP mode.
4. Complete the fields **IP address** and **WINS**, you also have to complete **Subnet mask** and **Gateway** fields.
5. Click on **Restart Network** button.

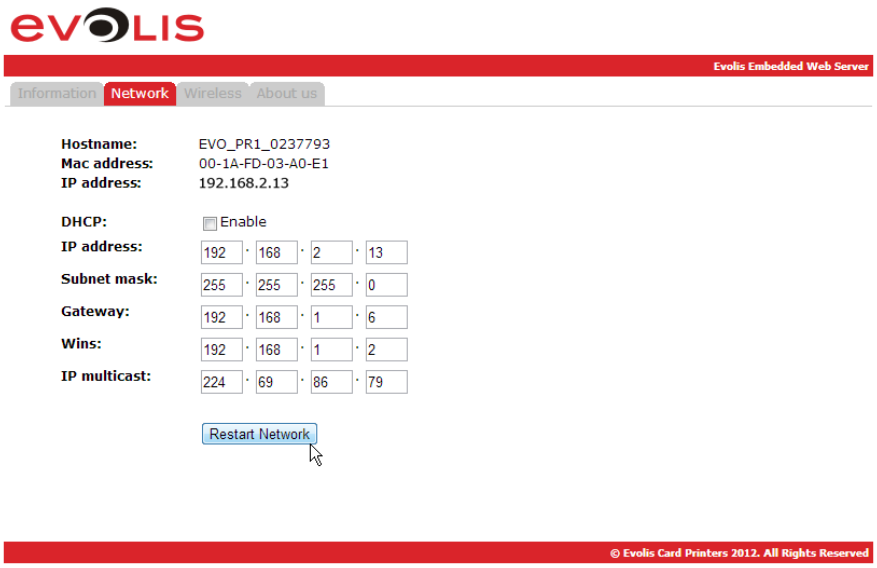
Evolis Embedded Web Server
Information
Network
Wireless
About us
Hostname: EVO_PR1_0237793
Mac address: 00-1A-FD-03-A0-E1
IP address: 192.168.2.13
DHCP: Enable
IP address: 192 . 168 . 2 . 13
Subnet mask: 255 . 255 . 255 . 0
Gateway: 192 . 168 . 1 . 6
Wins: 192 . 168 . 1 . 2
IP multicast: 224 . 69 . 86 . 79
Restart Network
© Evolis Card Printers 2012. All Rights Reserved

Figure 11: Web server (Static IP)

6.2.2 With escape commands

1. Open the Evolis Print Center and right-click on the printer you want to configure, then on properties.
2. In the printer properties window, click on **Maintenance**.
3. In Command field, type sequentially:
   - **Pip;192.168.2.13**
   - **Pews;192.168.1.2**
   - **Penm;255.255.255.0**
   - **Pegw;192.168.1.6**
   - **Snetw**.
   - Check your configuration by typing:
     - **Rip;1**. The result should be: **192.168.2.13 Manual**
     - **Rews** The result should be: **192.168.1.2**
     - **Renm** The result should be: **255.255.255.0**
     - **Regw** The result should be: **192.168.1.6**

6.3 Configuring a printer with a static IP address, on a subnet without WINS resolution

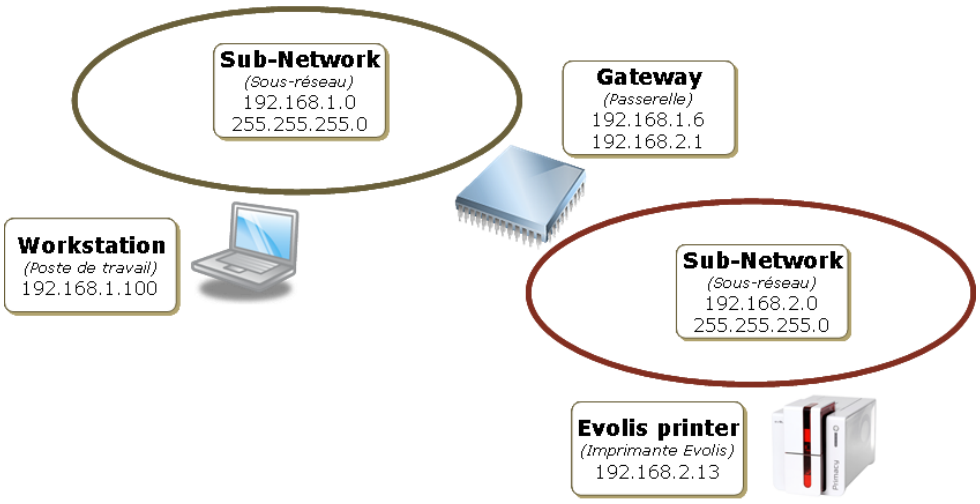

Figure 12: Static IP configuration without WINS resolution

6.3.1 With the embedded web server

1. Open the web server page.
2. Click on Network tab.
3. Uncheck the DHCP checkbox to disable the DHCP mode.
4. Complete the **IP address**, **Subnet mask** and **Gateway** fields.
5. Complete the field **WINS** with **0.0.0.0**
6. Click on **Restart Network** button.

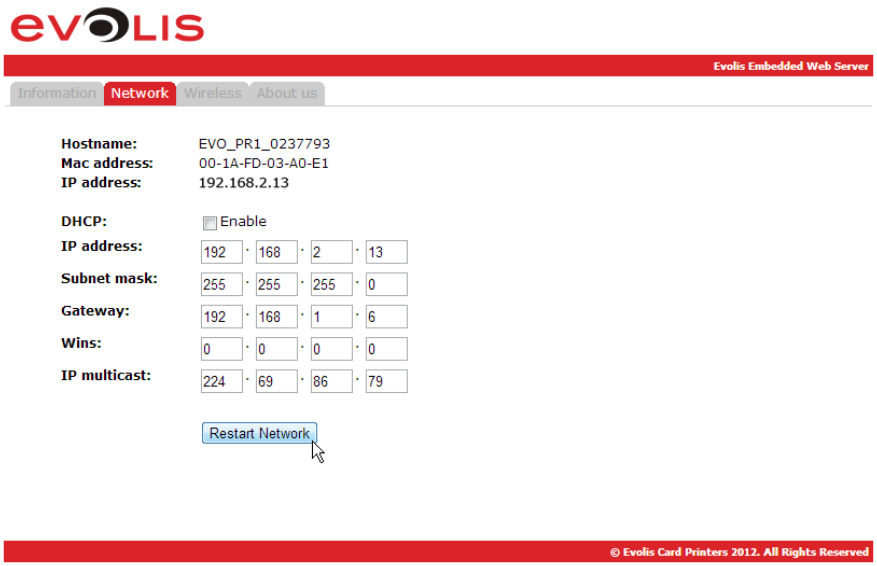

Figure 13: Web server (Without WINS resolution)

6.3.2 With escape commands

1. Open the Evolis Print Center and right-click on the printer you want to configure, then on properties.
2. In the printer properties window, click on **Maintenance**.
3. In Command field, type sequentially:
   - **Pip;192.168.2.13**
   - **Pews;0.0.0.0**,
   - **Penm;255.255.255.0**
   - **Pegw;192.168.1.6**
   - **Snetw**.
   - Check your configuration by typing:
     - **Rip;1**. The result should be: **192.168.2.13 Manual**
     - **Rews** The result should be: **0.0.0.0**
     - **Renm** The result should be: **255.255.255.0**
     - **Regw** The result should be: **192.168.1.6**

6.4 Configuring a printer in Wi-Fi mode - Ad hoc with no security

6.4.1 With the embedded web server

1. Open the web server page.
2. Click on Network tab.
3. Uncheck the DHCP checkbox to disable the DHCP mode.
4. Complete the **IP address** and **Subnet mask** fields.
5. Click on Wireless tab.
6. Choose **ad-Hoc** in **Mode** field.
7. Complete the **Channel** and **SSID** fields and set the **Security** field to **None**.
8. Click on **Restart Network** button.

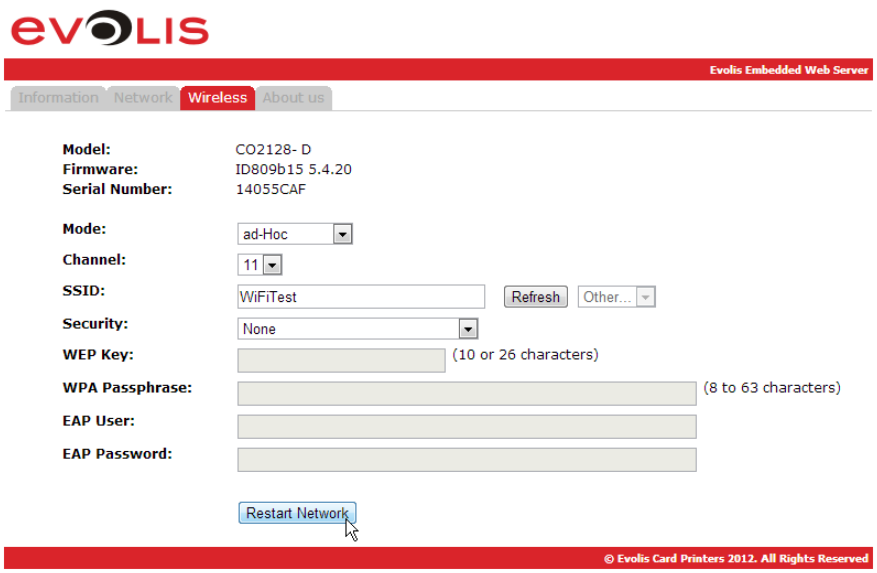

Figure 14: Web server (Wi-Fi - Ad hoc)

6.4.2 With escape commands

1. Open the Evolis Print Center and right-click on the printer you want to configure, then on properties.
2. In the printer properties window, click on **Maintenance**.
3. In Command field, type sequentially:
   - **Pip;192.168.2.13**
   - **Penm;255.255.255.0**
   - **Pwifi;MDE;1**
   - **Pwifi;WLCH;#Channel** (i.e. 11) where #Channel is the channel of WiFi signal (between 1 and 13).
   - **Pwifi;WSI0;Name_Of_SSID** (i.e. WiFiTest)
   - **Pwifi;WST0;0**
   - **Snetw**
   - Check your configuration by typing:
     - **Rip;1**. The result should be: **192.168.2.13 Manual**
     - **Rwifi;all** You should verify that the previous parameters are correctly set.

6.5 Configuring a printer in Wi-Fi mode - Access point with Wep 128 bits security and static IP adress

6.5.1 With the embedded web server

1. Open the web server page.
2. Click on Network tab.
3. Uncheck the DHCP checkbox to disable the DHCP mode.
4. Complete the **IP address** and **Subnet mask** fields.
5. Click on Wireless tab.
6. Choose **Access point** in **Mode** field.
7. Complete the **Channel** and **SSID** fields.
8. Set the **Security** field to **Wep_128** and complete the **WEP Key** field (it may contain 10 or 26 hexadecimal characters)
9. Click on **Restart Network** button.

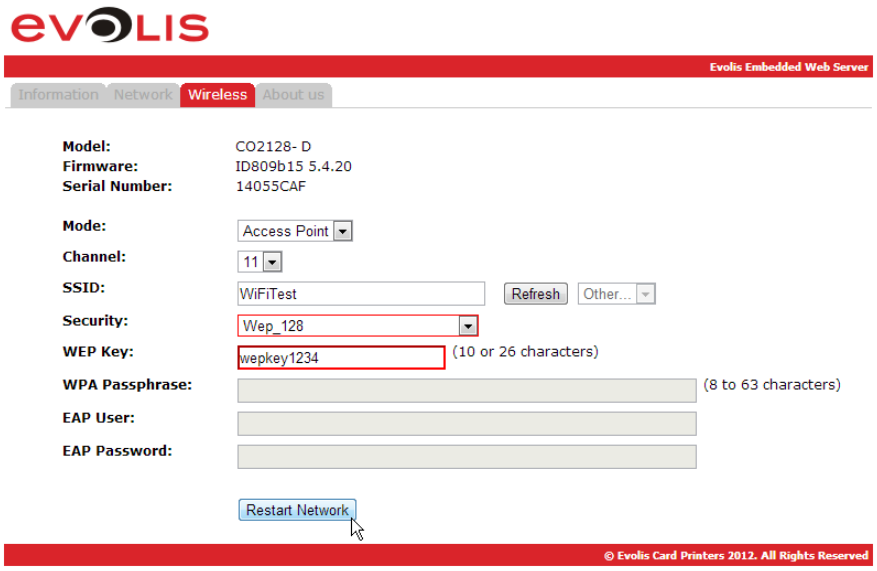

Figure 15: Web server (Wi-Fi - Access point - Wep 128)

6.5.2 With escape commands

1. Open the Evolis Print Center and right-click on the printer you want to configure, then on properties.
2. In the printer properties window, click on **Maintenance**.
3. In Command field, type sequentially:
   - **Pip;192.168.2.13**
   - **Penm;255.255.255.0**
   - **Pwifi;MDE;2**
   - **Pwifi;WLCH;#Channel** (i.e. 11) where #Channel is the channel of WiFi signal (between 1 and 13).
   - **Pwifi;WSI0;Name_Of_SSID** (i.e. WiFiTest)
   - **Pwifi;WST0;0** to Disable security before send a new setting
   - **Pwifi;WKY0;WEP_Key** (i.e. wepkey1234) where WEP_Key may contain 10 or 26 hexadecimal characters
   - **Pwifi;WST0;2**
   - **Snetw**
   - Check your configuration by typing:
     - **Rip;1**. The result should be: **192.168.2.13 Manual**
     - **Rwifi;all** You should verify that the previous parameters are correctly set.

6.6 Configuring a printer in Wi-Fi mode - Access point with WPA-AES security and IP adress in DHCP mode

6.6.1 With the embedded web server

1. Open the web server page.
2. Click on Network tab.
3. Check the DHCP checkbox to enable the DHCP mode.
4. Click on Wireless tab.
5. Choose **Access point** in **Mode** field.
6. Complete the **Channel** and **SSID** fields.
7. Set the **Security** field to **WPA2-PSK [AES]** and complete the **WPA Pass-Phrase** field (8 to 63 characters).
8. Click on **Restart Network** button.

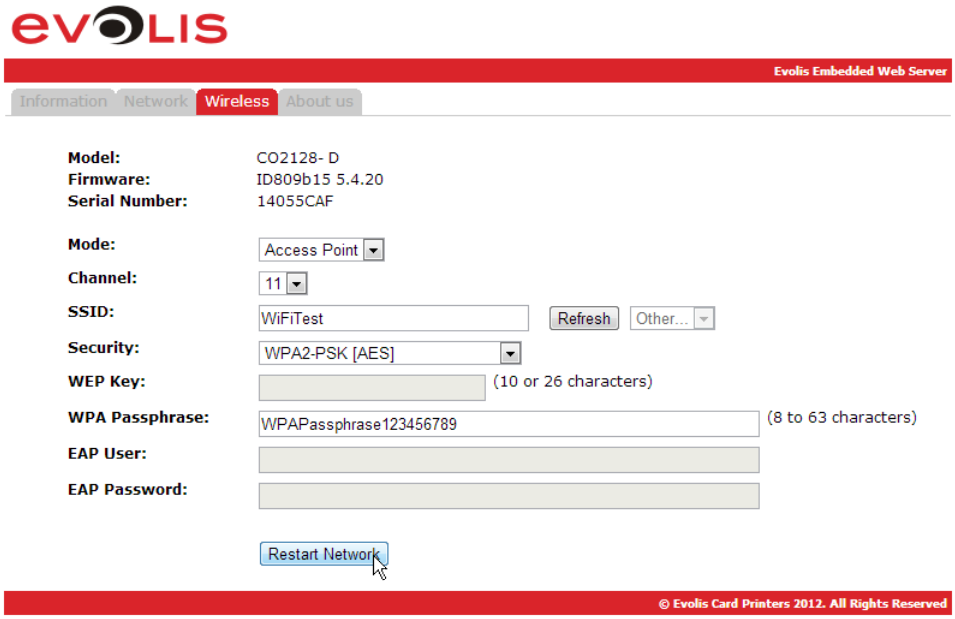

Figure 16: Web server (Wi-Fi - Access point - WPA-AES)

6.6.2 With escape commands

1. Open the Evolis Print Center and right-click on the printer you want to configure, then on properties.
2. In the printer properties window, click on **Maintenance**.
3. In Command field, type sequentially:
   - **Pip;dhcp**
   - **Pwifi;MDE;2**
   - **Pwifi;WLCH;#Channel** (i.e. 11) where #Channel is the channel of WiFi signal (between 1 and 13).
   - **Pwifi;WSI0;Name_Of_SSID** (i.e. WiFiTest)
   - **Pwifi;WST0;0** to Disable security before send a new setting
   - **Pwifi;WPP0;Keyphrase** (i.e. WPAPassphrase123456789) where Keyphrase contains 8 to 63 characters
   - **Pwifi;WST0;4**
   - **Snetw**
   - Check your configuration by typing:
     - **Rip;1**. The result should be: **192.168.2.13 Auto**
     - **Rwifi;all** You should verify that the previous parameters are correctly set.